Minimum Qualification Specifications for the Class:

DATA PROCESSING SYSTEMS MANAGER (DATA PROCSSG SYSTS MGR)

Education Requirements:

Graduation from an accredited college or university.

Excess experience of the types and quality described below or any administrative, professional, or other responsible work which required a high degree of analytical skill may be substituted for training an a year-for-year basis.

Experience Requirements:

Except for the substitutions provided below, applicants must have had the type of experience described in the statements immediately following, and in the amounts shown in the table below:

Class Title	DPSA Exper	Supvry	Spec	Admin	Total
	(yrs)	Exper (yrs)	Exper (yrs)	Exper (yrs)	Exper (yrs
Data Procssg Systs Mgr	3-1/2	2	0	0	5-1/2

Data Processing Systems Analysis Experience:
Progressively responsible work experience in computer systems analysis which involved the analysis and design of systems for electronic processing of data; or stored computer programming experience which included participation in systems analysis. At least one year of the required specialized experience must have been at the fully competent level comparable to the Data Processing Systems Analyst IV level in State government.

Supervisory Experience: Experience in computer systems analysis which included: (1) planning and directing the work of other analysts; (2) assigning and reviewing their work; (3) advising them on difficult and complex problem areas; (4) training and developing them; and (5) timing and scheduling their work.

**Specialized Experience: For the class Data
Processing Systems Administrator, three years of
specialized experience in mini/micro computer systems and
data communications networks is required. However, this
specialized experience may have been obtained concurrently
with any of the other experience required of the class
(e.g., Data Processing Systems Analyst, supervisory,
etc.). Such experience must have been at least of the
scope, difficulty and independence of a technical expert,
as described below, and must have involved providing
advice and guidance to line and other data processing
agency staff and included participation in the formulation
of policies, standards, operations, guidelines and
procedures. In addition, this experience must have
involved all of the following:

Mini/Micro Computer System Experience:

At least one (1) year of the experience must have involved all of the following:

- Planning, designing, and developing mini or micro computer systems; and
- 2. Use of two (2) of the following: (a) a fourth generation language such as NATURAL, ADA or other, vendor specific; (b) a fourth generation application builder such as PACE or SPEED II; or (c) a fourth generation code generator such as Computer Aided Programming System; and
- Experience in integrating data base management, electronic spreadsheet and word processing applications; and
- 4. Familiarity with data communication requirements for and their use with mini or microcomputers.

Data Communications, Networking Experience:

At least one (1) year of the experience must have involved all of the following:

 Planning for and developing a computer network which included a mix of micro, mini and mainframe computers in a multi-vendor environment; and

- Use of at least two of the following four types of transmission media: phone lines, base-band coaxial cable, broad-band coaxial and fibre optics; and
- 3. Knowledge of and experience with multiple data communication protocols; and
- 4. Work on data communications for at least one local area network characterized by (a) use of non-phone lines; (b) sharing of transmission media; and (c) high speed. Computer-to-computer and terminal-to-computer arrangements are acceptable.

The Mini/Micro System Experience and Networking Experience may have been obtained concurrently.

Administrative Experience: Experience as the full assistant to the chief administrator of the State's central computer agency providing systems development, consultation and operation services on a statewide basis to the major systems of the various departments. The experience must have demonstrated responsibility for assisting in all aspects of the overall administration of the State's central electronic data processing program including management planning, policy-making as well as work processing.

Alternatively, this experience requirement may have been met by two (2) years of any other administrative data processing experience such as serving as the head of a branch of the State's central computer agency or the head of systems development and computer services for a department. Such experience must have included overall technical guidance and leadership and the responsibility for planning, directing and coordinating the activities of the assigned operation and active participation in administrative functions such as (1) program evaluation and analysis, (2) development of the budget and its justification; and (3) policy formulation and implementation.

*For the Data Processing Systems Assistant Administrator level, administrative aptitude rather than actual administrative experience may be accepted.

Administrative aptitude will be considered to have been met for this level when there is strong affirmative evidence of the necessary administrative abilities. evidence may be in the form of success in regular or special assignments or projects which involve administrative problems; e.g., in planning, organizing, coordinating and directing a program; interest in management demonstrated by the performance of work assignments in a manner which clearly indicates awareness of managerial problems and the ability to solve them; by the completion of educational or training courses in the areas of management accompanied by the application of the principles, which are learned, to work assignments; management's observation and evaluation of the applicant's leadership and managerial capabilities and success in trial assignments to managerial and/or administrative tasks.

Substitutions Allowed:

- 1. Satisfactory completion of all academic requirements for a bachelor's degree in computer science or in management information/management decision science or in another major including completion of course work comparable to a major in either of these fields from an accredited college or university may be substituted for six (6) months of DPSA Experience.
- 2. Satisfactory completion of all academic requirements for a master's degree in computer science from an accredited university may be substituted for one and one-half (1-1/2) years of DPSA Experience.
- 3. Satisfactory completion of all academic requirements for a doctor's degree in computer science from an accredited university may be substituted for two and one-half (2-1/2) years of DPSA Experience.
- 4. Excess Supervisory and/or Administrative Experience of the types and quality described above may be substituted for DPSA Experience on a month-for-month basis.

4. Excess Administrative Experience of the type described above may be substituted for the required Supervisory Experience on a month-formonth basis.

Quality of Experience:

Possession of the required number of years of experience will not in itself be accepted as proof of qualification for a position. The applicant's overall experience must have been of such scope and level of responsibility as to conclusively demonstrate that he/she has the ability to perform the duties of the position for which he/she is being considered.

Selective Certification:

Specialized knowledge, skills and abilities may be required to perform the duties of some positions. In such positions, certification may be restricted to eligibles who possess the pertinent experience and/or training required to perform the duties of the position.

Agencies requesting selective certification must show the connection between the kind of training and/or experience on which they wish to base selective certification and the duties of the position to be filled.

Tests:

Applicants must qualify on the appropriate examination for the class. For non-competitive actions, the examination may be waived.

Physical and Medical Requirements:

Applicants must be physically able to perform, efficiently and effectively, the essential duties of the position which typically require the ability to read without strain printed material the size of typewritten characters, glasses permitted, and the ability to hear the conversational voice, with or without a hearing aid, or the ability to compensate satisfactorily. Disabilities in these or other areas will not automatically result in disqualification. Those applicants who demonstrate that they are capable of performing the essential functions of the position with or without reasonable accommodation will not be disqualified under this section.

Any condition which would cause applicants to be a hazard to themselves or others is cause for disqualification.

Any disqualification under this section will be made only after a review of all pertinent information including the results of the medical examination, and requires the approval of the Director.

This is an amendment to the minimum qualification specification for the class DATA PROCESSING SYSTEMS MANAGER approved on July 26, 1982.

DATE APPROVED: 3/4/86 /s/ Clement L. Kamalu

JAMES H. TAKUSHI Director of Personnel Services